

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior claim listings in the application:

1. (Currently amended) A method of surveillance for the presence of a chemical, biological, or radiological agent, which method comprises:
 - assaying a sample derived from street debris materials collected from a sample domain for the presence of a chemical, biological, or radiological agent,
 - wherein the sample domain is a route undertaken by a street sweeper machine through a city street and comprises at least one collection point from which the materials are collected from a city street in a pre-existing operation, otherwise unrelated to surveillance.
2. (Canceled)
3. (Previously presented) The method of surveillance of claim 1, wherein the materials are collected in a predetermined, traceable route.
4. (Previously presented) The method of surveillance of claim 1, further comprising the steps of
 - (a) introducing *Tetrahymena pyriformis* to the sample, and
 - (b) assaying for *Bacillus anthracis*.
5. (Original) The method of surveillance of claim 1, wherein the sample is assayed for *Bacillus anthracis* using real time polymerase chain reaction (RTm-PCR).
6. (Previously presented) The method of surveillance of claim 1, wherein the sample is derived from a street sweeper machine.
7. (Previously presented) The method of surveillance of claim 1, comprising obtaining a sample from a collection bin, and assaying the sample.
8. (Original) The method of surveillance of claim 7, comprising placing an assaying device in communication with the collection bin.

9. (Original) The method of surveillance of claim 7, wherein the sample is derived from rinsing collection bins that collect refuse from the street sweeper machine.
10. (Canceled)
11. (Original) The method of surveillance of claim 1, wherein the materials are collected in a predetermined pattern, and brought to a central location.
12. (Original) The method of surveillance of claim 1, wherein assaying for the presence of a chemical, biological, or radiological agent comprises comparing a level of chemical, biological or radiological agent to a normal level of a chemical, biological or radiological agent.
13. (Original) The method of surveillance of claim 12, wherein the normal level of a chemical, biological or radiological agent comprises background noise.
14. (Original) The method of surveillance of claim 12, wherein the normal level of a chemical, biological or radiological agent is ascertained from a second sample domain.
15. (Previously presented) The method of surveillance of claim 1, wherein assaying for the presence of a chemical, biological, or radiological agent comprises detecting an increase or a decrease in a level of chemical, biological or radiological agent relative to an earlier assay.
- 16-19. (Canceled)
20. (Original) The method of surveillance of claim 1, wherein the sample is assayed for *Bacillus thuringiensis*.
21. (Canceled)
22. (Original) The method of surveillance of claim 1, wherein collection integrity is preserved.
23. (Previously presented) The method of surveillance of claim 1, comprising obtaining and assaying a sample from within a collection bin.

24. (Original) The method of claim 23, comprising placing an assaying device in communication with the collection bin.
25. (Canceled)
26. (Previously presented) A method of surveillance for the presence of a chemical, biological, or radiological agent, which method comprises:
 - (a) isolating a sample from a sample domain, which sample comprises debris or fluids that is collected from rinsing an instrumentality used in the collection of street debris materials from the sample domain by a street sweeper machine, and wherein the sample domain comprises a collection of materials on a regular, systematic basis through a predetermined, traceable route, the predetermined traceable rout converging on a centralized location;
 - (b) assaying the sample for the presence of a chemical, biological, or radiological agent using PCR technology, radiation detector technology, spectrometry technology, or radioimmunoassay technology;
 - (c) determining a result based on the assay; and
 - (d) reporting the result.
27. (Original) The method of surveillance of claim 26, wherein collection integrity is preserved.
28. (Withdrawn) A system for surveillance for chemical, biological, or radiological agents, which method comprises:

a sampling means for obtaining samples from collection points from which the materials are collected in a pre-existing operation, unrelated to surveillance; and

an assaying means, for determining the presence of a chemical, biological, or radiological agent in the sample from the sample domain.

29. (Previously presented) A method for determining the presence of *Bacillus anthracis* within a sample comprising introducing *Tetrahymena pyriformis* to the sample, and assaying the sample for the presence of *Bacillus anthracis*.
30. (Canceled).
31. (Canceled).
32. (Previously presented) The method of claim 29, further comprising the step of introducing the sample to a membrane at a temperature effective to kill vegetative bacteria.
33. (Previously presented) The method of claim 32, wherein the temperature effective to kill the vegetative bacteria is about 70 °C to about 80 °C.
34. (Previously presented) The method of claim 29, wherein the sample is introduced to a first membrane having a pore size larger than the *Bacillus anthracis*, and a second membrane having a pore size smaller than the *Bacillus anthracis*.
35. (Previously presented) The method of claim 34, wherein the first membrane and/or the second membrane is at a temperature effective to kill vegetative bacteria.
36. (Previously presented) The method of claim 35, wherein the temperature effective to kill the vegetative bacteria is about 70 °C to about 80 °C.
37. (Previously presented) A method of detecting the presence of a chemical, biological, or radiological agent which comprises:
 - (a) obtaining at least one sample from a collection of street debris that has been exposed to the environment and is collected from a street sweeper machine that follows a pre-defined, traceable route unrelated to surveillance and continuously collects the street debris from an open environment along the pre-defined route;
 - (b) assaying the sample for the presence of a chemical, biological, or radiological agent;

- (c) determining a result based on the assay;
 - (c) correlating the result with a known normal level of the chemical, biological, or radiological agent; and
 - (d) reporting the result.
38. (Previously presented) The method of claim 37 further comprising the step of correlating the assay result of a sample from a first predefined route with a second assay result of a sample from the first predetermined route to localize an area contaminated with the chemical, biological, or radiological agent.
39. (Previously presented) The method of claim 37 further comprising the step of correlating the assay result of a sample from a first predefined route with the assay result of a sample from a second predetermined route to localize an area contaminated with the chemical, biological, or radiological agent.
40. (Previously presented) The method of claim 37 wherein the chemical, biological, or radiological agent is a member selected from the group consisting of radioactive agents, microbial organisms, viruses, and hazardous chemical agents.
41. (Previously presented) The method of claim 39 wherein the microbial agent is *Bacillus anthracis*.
42. (Previously presented) The method of claim 37 wherein the sample derived from a collection of street debris is obtained from a bin wherein the collection of street debris from at least one street sweeper has been pooled.
43. (Previously presented) The method of claim 41 wherein the sample derived from a collection of street debris is obtained from a bin wherein the collection of street debris from more than one street sweepers has been pooled.

44. (Previously presented) The method of claim 37 further comprising determining the presence of a *Bacillus* spore within a sample comprising introducing *Tetrahymena pyriformis* to the sample, and assaying the sample for the presence of a *Bacillus* spore.
45. (Previously presented) The method of claim 44, wherein the *Bacillus* spore is *Bacillus anthracis*.
46. (Previously presented) The method of claim 44, wherein the *Bacillus* spore is *Bacillus thuringiensis*.